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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/852,375

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Martin Blumenfeld

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7590

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FISH & RICHARDSON P.C.
3300 DAIN RAUSCHER PLAZA
60 SOUTH SIXTH STREET
MINNEAPOLIS, MN 55402

EXAMINER

NGUYEN, TU T

ART UNIT

PAPER NUMBER

2877

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/852,375

Applicant(s)

BLUMENFELD ET AL.

Examiner

Tu T. Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-115 is/are pending in the application.
- 4a) Of the above claim(s) 22 and 95-104 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21, 23-94 and 105-115 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

Applicant's election without traverse of Group I (claims 1-21, 23-94, 105-115) in the reply filed on 04/26/2004 is acknowledged.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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Claims 1-21,23-94,105-114 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-37,39-77, 88-97 of copending Application No. 09/434,027. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of copending Application No. 09/434,027 discloses all the claimed limitations in the current application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-21,23-94,105-112 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al (2003/0133009) OR Stabile et al (5,872,623) in view of Che (6,140,653).

With respect to claims 1,23,80-81, Stabile discloses a system for use in detecting biological sample. The system comprises: a position apparatus 205 (fig 1B) for providing the sample in a sampling position; an electronic light detector array 212 (fig 1B) having a plurality of detector pixels located at particular detector pixel addresses

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(figs 3B or 6 or column 2, lines 54-67; column 3, lines 1-15); a light source 201 (fig 1B); a control circuit 250 (fig 1B) for acquiring at least one frame of image data.

Brown discloses a system for use in detecting biological sample. The system comprises: a position apparatus 48 (fig 3) for providing the sample 32 (fig 3) in a sampling position; an electronic light detector array 38 (fig 3) having a plurality of detector pixels located at particular detector pixel addresses (paragraphs [0029], [0032], [0034], [0035]); a light source 36 (fig 3); a control circuit 47 (fig 3) for acquiring at least one frame of image data.

Brown or Stabile do not explicitly disclose a sample holding structure having first and second opposing sides. The claimed sample holding structure would have been known. Further, Che discloses a sample holder 60 (fig 2). It would have been obvious to modify Brown or Stabile with a known sample holder or Che's sample holder to control the position of the sample easier.

With respect to claims 2,24, Brown discloses acquiring a plurality of frames of image data (fig 4, fig 5).

With respect to claim 3, Brown discloses a display 110 (fig 7).

With respect to claims 4,20,25,43,79, Brown discloses using the system for detecting fluorescence samples (paragraph [0003]) and detecting only a portion of sample 42 (fig 3) at a time.

With respect to claims 5,26,44, Brown does not explicitly disclose the claimed limitation. However, Stabile discloses a system wherein one or more of the detector pixels 711 (fig 7) does not include any portion of the holding structure 722 (fig 7).

With respect to claims 6,13,27,34, Che discloses the sample surface 12 (fig 1) facing the plurality of detector pixels 18 (fig 1).

With respect to claims 7,28,45,54-56,82, Brown discloses the claimed filter 35 (fig 3).

With respect to claims 8,14,29,35,46,111, the claimed focusing lens would have been known. It would have been obvious to modify Brown with the known focusing lens to facilitate the detecting.

With respect to claims 9,15,30,36,47, Stabile discloses a holding structure comprising an opaque material 722 (fig 7).

With respect to claims 10-11,16,31-32,37,69, it would have been obvious a design choice to modify the prior arts to include a portion of the holding structure or to use the system to test different type of samples or to select different range of wavelengths to pass to the detector for detecting different characteristics of the sample.

With respect to claims 12,33, Brown discloses detecting reflected light (fig 1B or abstract).

With respect to claims 17-19,38-40,50-51,73-74, it would have been obvious to modify prior art to test different samples such as a micro-array having one or more sequences of nucleic acids immobilized for different purposes.

With respect to claims 21,41,48,84,86-94,106-108, it would have been obvious to modify the light path of the prior arts with different ranges or different materials for testing different samples or testing in different environments.

With respect to claims 42,49,72,85,105, refer to discussion in claims 1, 17.

With respect to claims 52-53,75-76, Stabile discloses a sample holder made from a light-transmissive material 105 (fig 1A) and detecting a transmitted light (fig 1A or abstract).

With respect to claims 57-61,77-78, the claimed mapping lens would have been known. It would have been obvious to modify Stabile with a known mapping lens to facilitate the testing.

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With respect to claim 62-68,83, it would have been obvious to modify the location of the elements such that they can be in direct physical contact with other to improve the system performance.

With respect to claims 70-71, Stabile discloses dark spots 107 (fig 1A) for blocking a light.

With respect to claims 109-110, 112, it would have been obvious to modify Stabile with a loading mechanism to load the sample easier and it would have been obvious to use a programmable computer for performing the testing to save testing time.

Claims 113-115 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al (2003/0133009) OR Stabile et al (5,872,623) in view of Che (6,140,653) and further view with Rushbrooke et al (4,922,092).

With respect to claim 113, Brown or Stabile do not disclose using fiber bundle for transmitting light. Rushbrooke disclose a system using fiber bundle 122 (fig 4A) for transmitting light. It would have been obvious to modify the prior arts with the fiber bundle as taught by Rushbrooke to make the system more accurate.

With respect to claim 114, refer to discussion in claim 53 above.

With respect to claim 115, Brown discloses a movement structure 48 (fig 3).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu T. Nguyen whose telephone number is (571) 272-2424. The examiner can normally be reached on T-F 7:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tu T. Nguyen
Primary Examiner
Art Unit 2877

07/09/2004